

CH2M HILL Hanford Group, Inc.	Manual	ESHQ
HOISTING AND RIGGING	Document	TFC-ESHQ-S_IS-C-05, REV A-1
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	Issue Date	March 11, 2003
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1.0 PURPOSE AND SCOPE

This procedure establishes specific CH2M Hill Hanford Group, Inc. (CH2M HILL) guidance and requirements for the safe handling and moving of materials by motorized crane or hoist.

This procedure applies to all hoisting and rigging activities conducted by, for, or on CH2M HILL controlled facilities.

This procedure does not cover industrial truck usage. For guidance and requirements for industrial trucks, refer to [DOE-RL-92-36](#).

2.0 IMPLEMENTATION

This procedure is effective on the date shown above.

3.0 RESPONSIBILITIES

Responsibilities are contained within Section 4.0.

4.0 PROCEDURE

(7.1.1, 7.1.2, 7.1.3)

4.1 General

Hoisting and rigging activities within the scope of this procedure shall be conducted in accordance with DOE-RL-92-36.

- | | |
|--------------------------------------|--|
| Facility Manager/
Project Manager | <ol style="list-style-type: none"> 1. Determine hoisting and rigging needs for facility and scheduled work activities. 2. Determine if the proposed lift qualifies as a critical lift or not. 3. Relay to the area task planner proposed hoisting and rigging needs and requirements. |
| Planner | <ol style="list-style-type: none"> 4. If lift is determined to be a critical lift, initiate a critical lift procedure to be prepared by an approved author; comply with DOE-RL-92-36, Section 3, "Critical Lifts for Specific Requirements." |

NOTE: Field revisions to the original procedure may be made with concurrence of the field work supervisor, the designated leader, the responsible Safety organization, and an approved rigging engineer.

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Approved Author

5. Prepare a critical lift procedure:
 - a. Ensure the critical lift procedure is approved by:
 - Responsible facility, project, or maintenance manager
 - Responsible safety organization
 - Approved rigging engineer (CH2M HILL approved)
 - Field work supervisor (critical lift person in charge assigned by management).

Planner

6. If lift is determined not to be a critical lift:
 - a. Identify and plan non-critical lift
 - b. Insert non-critical lift in work package.
7. Submit work package that utilizes hoisting and rigging for approval in accordance with [TFC-OPS-MAINT-C-01](#).

Critical Lift Person
in Charge

8. Perform pre-lift and pre-job requirements in accordance with [DOE-RL-92-36](#) and [TFC-OPS-MAINT-C-02](#).
9. Perform lift as designed and approved in accordance with [DOE-RL-92-36](#), [29 CFR 1910](#), Subpart N, and [29 CFR 1926](#), Subpart N.
10. Perform post lift documentation.

NOTE: The documentation for critical lifts shall be transmitted to the manager and is auditable for one year after the lift. For non-critical lifts, documentation shall be placed with the work package document.

4.2 Specific

Engineering

1. For cover block lifts, include the following two statements into the critical lift procedure.
 - Engineering has established the recommended Not-To-Exceed Lifting Pull limit as xxxx lbs.
 - ~~CH2M HILL rigging engineers may increase the Recommended Not To Exceed Lifting Pull limit at the time of the lift based on the actual field conditions, "not to exceed the calculated Maximum Allowable Rated Capacity," by redlining the critical lift procedure.~~
2. Provide proper protection for the drilled and tapped (threaded) holes in the steel components following removal of swivel hoist rings. The suggested method is to plug the hole with bolts or any plugging device with Anti-Seize lubricant. To reinstall swivel hoist rings, remove the plug and clean the lubed area to bare metal by using any appropriate

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solvent.

3. For cover blocks and critical lifts, if permanent installed rigging hardware does not have test documentation, ensure rigging hardware and/or lifting attachments have appropriate supporting calculations and design media and includes any inspection requirements, torque requirements, and hoisting and rigging requirements.

Safety and Health

4. Perform functions as the “responsible Safety organization” in accordance with [DOE-RL-92-36](#):
 - Ensure subcontractor’s critical lift procedures and governing critical lifts they perform are approved by the subcontractor’s own Safety organization prior to being submitted for CH2M HILL approval.
 - Ensure subcontractor’s safety personnel are trained in hoisting and rigging activities that would qualify them to sign on their companies’ critical lifts.

5.0 DEFINITIONS

No terms or phrases unique to this procedure are used.

6.0 RECORDS

The following records are generated during the performance of this procedure:

- Critical Lift Plans.

The facility manager or project manager is responsible for record retention and retirement in accordance with TFC-BSM-IRM_DC-C-02.

7.0 SOURCES

7.1 Requirements

1. [DOE-RL-92-36](#), “Hanford Site Hoisting and Rigging Manual.” (S/RID)
2. [29 CFR 1910](#), “Occupational Safety and Health Standards,” Subpart N, “Materials Handling and Storage.” (S/RID)
3. [29 CFR 1926](#), “Safety and Health Regulations for Construction.” (S/RID)
 - a. Subpart H, “Materials Handling, Storage, Use, and Disposal.”
 - b. Subpart N, “Cranes, Derricks, Hoists, Elevators, and Conveyors.”
 - c. Subpart W, “Rollover Protective Structures; Overhead Protection.”

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7.2 References

1. [HNF-IP-1266](#), "Tank Farm Operations Administrative Controls."
2. HNF-IP-0842, [RPP Administration](#).
 - [Volume 4, Section 4.39](#), "Structural Integrity Verification of Permanent Lifting Points."
 - [Volume 9, Section 2.3](#), "ES&H and Radiological Control Subcontractor Oversight."
 - [Volume 9, Section 4.5](#), "Safety Inspections."
 - ~~Volume 13, Section 1.3, "Construction Project Interface."~~
3. RPP-8360, "Lifting Bail Evaluation Process."
4. [TFC-BSM-IRM DC-C-02](#), "Records Management."
5. [TFC-OPS-MAINT-C-01](#), "Tank Farm Contractor Work Control."
6. [TFC-OPS-MAINT-C-02](#), "Pre-Job Briefing."
7. [TFC-OPS-OPER-C-10](#), "Vehicle and Dome Load Control in Tank Farm Facilities."
8. ~~[TFC-PRJ-CM-C-07, "Construction Notice of Intent."](#)~~

Figure 1. Hoisting and Rigging.